IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Ankur P. Panchbudhe, Anand A. Kekre
Assignee:	VERITAS Operating Corporation
Title:	Performance of Operations on Selected Data in a Storage Area
Serial No.:	10/742,128 Filing Date: December 19, 2003
Examiner:	Unassigned Group Art Unit: 2186
Docket No.:	VRT0117US

Austin, Texas
September 1, 2004

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PETITION TO MAKE SPECIAL UNDER 37 CFR §1.102(d)

Dear Sir:

The applicants hereby petition pursuant to 37 CFR §1.102(d) and MPEP § 708.02(VIII) to make the above-identified application special. Please charge Deposit Account No. 502306 for the fee of $130.00 for this petition as set forth in 37 CFR §1.17(h).

Should the Office determine that all the claims presented are not obviously directed to a single invention, the applicants will make an election without traverse as a prerequisite to the grant of special status.

The applicants respectfully submit that a pre-examination search has been performed by a professional search firm in the following classes/subclasses:

Class	Subclasses
707	202
714	6, 16, 17

Enclosed is a preliminary amendment which requests to cancel claims 1-26 and add claims 27-54. The references have been evaluated herein in light of the claims as amended therein.

Also enclosed are copies of the following references which are presently believed to be, from among those made of record in the accompanying Information Disclosure Statement and any previously filed Information Disclosure Statement, the most closely related to the subject matter encompassed by the claims:

2003/0101189   US 6,330,572   US 6,681,339

Detailed Discussion of the References

U.S. Patent No. 6,330,572 (Sitka) discloses a system and method for managing the storage of files within a hierarchical storage architecture. The system and method are used in managing large files that include graphical images. In one embodiment, a fileset feature permits grouping images associated with a particular customer, project, or transaction into a logical collection. Operations can be performed on the files as a group by performing the operation on the fileset. For example, in Fig. 2, file manager 58 performs operations on individual files, and fileset manager 42 performs operations that involve all files in a fileset. Fileset manager 42 translates a fileset request into a set of file requests for file manager 58, tracks the completion of the associated file requests, and notifies the requester when the fileset operation is complete. See, e.g., column 14, lines 39-49.

Filesets can be configured to have their member files reside together on common media, so that operations on the fileset, such as archival, migration, retrieval, and deletion, can be performed faster than operating on the individual files. See, e.g., column 2, lines 38-43. A fileset can be configured such that activity on an individual file member triggers the same activity on the other file members of the fileset. See, e.g., column 2, lines 51-53.

While Sitka does teach performing an operation on all members of a fileset, Sitka does not teach, *inter alia*, comparing the first set of locations targeted by the operation to a second set of locations, as required by independent claim 27 and as generally required by claims 42, 46, 50, and 54 (as amended in the accompanying preliminary amendment). Accordingly, the applicants respectfully submit that claims 27-54 are allowable over Sitka.

U.S. Patent Application 2003/0101189 (Lanzatella) discloses techniques for logically representing a storage environment so that data can be accessed across heterogeneous storage networks and within distributed SAN environments. These storage networks can have a number of different file systems, volume managers, and operating systems. The data, referred to as a data object, resides in one storage environment, and a reference to the data object resides in another storage environment.

For example, in Fig. 5, references 514 reside in a first environment 516 associated with a first file system 510. Data objects 524 reside in a second environment 522 associated with a second file system 520. The storage environment having the reference but not the data object itself (environment 522 in Fig. 5) is referred to as a 'target' storage environment.

In one embodiment, a data structure is generated from the reference and represents one or more physical locations of the data object in the storage environment where the data object resides. An example of such a data structure is shown in Fig. 5 as functional data 400. Functional data 400 includes data about the physical location of the node, file system, volume manager, partitions / disks, and disks / subdisks on which the data object resides. The data structure is retained in the target storage environment to permit interfacing with one or more of the physical locations of the data object from the target storage environment. For example, functional data 400 includes all necessary access points within the computer-readable medium to gain access to the data object's · physical location.

Disparate or remote but similar storage environments can have direct or indirect access to the data structure. Therefore, the data object can be either accessed directly or indirectly or replicated within a disparate or remote but similar storage environment. Referring again to Fig. 5, data object 524 can be accessed from within the first file system having only references 514 by using map 530. Changes to the data structure are communicated between the storage environments, ensuring reliable use of the data structure in a heterogeneous networked storage environment.

While the data structure of Lanzatella can be used to perform an operation on a set of storage locations, Lanzatella does not teach any specific techniques to accomplish performing an operation on a set of locations that is different from the set of locations that are targeted by the operation. Lanzatella does not teach, *inter alia*, (1) identifying a first set of locations of the plurality of locations, wherein each location in the first set of locations meets a criterion to be targeted by the operation and then (2) comparing the first set of locations to a second set of locations. Furthermore, Lanzatella does not teach (3) performing the operation upon a third set of locations in the storage area, all as required

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by claim 27, and as generally required by claims 42, 46, 50, and 54 (as amended in the accompanying preliminary amendment). Accordingly, the applicants respectfully submit that claims 27-54 are allowable over Lanzatella.

U.S. Patent No. 6,681,339 (McKean) discloses a system and method for managing the storage of files within a hierarchical storage architecture. In a dual-active controller configuration, a stripe lock data structure is defined to maintain reservation status or stripe locks of cache lines within data extents that are part of a logical unit or storage volume. See, e.g., Abstract. When a controller fails, dirty cache line data of a failed controller is taken over by a survivor controller. See, e.g., Fig. 5, actions 3 and 4. The stripe lock data structure is used to process I/O requests from a host system by the failed controller.

The stripe lock data structure of McKean routes I/O operations from a failed controller to another controller, but there is no indication that an operation to be performed on one set of locations is actually performed on a different set of locations or that the targeted set of locations is compared to another set of locations. As a result, McKean does not teach (1) identifying a first set of locations of the plurality of locations, wherein each location in the first set of locations meets a criterion to be targeted by the operation, (2) comparing the first set of locations to a second set of locations, and (3) performing the operation upon a third set of locations in the storage area, all as required by claim 27, and as generally required by claims 42, 46, 50, and 54 (as amended in the accompanying preliminary amendment). Accordingly, the applicants respectfully submit that claims 27-54 are allowable over McKean.

Conclusion

In summary, the applicants respectfully submit that none of the references located during the pre-examination search, or otherwise made of record by the applicants, teaches or suggests (at least): (1) identifying a first set of locations of the plurality of locations, wherein each location in the first set of locations meets a criterion to be targeted by the operation, (2) comparing the first set of locations to a second set of locations, and (3) performing the operation upon a third set of locations in the storage area, all as required by claim 27, and as generally required by claims 42, 46, 50, and 54 (as amended in the accompanying preliminary amendment). Accordingly, the applicants respectfully submit that claims 27-54 are allowable over all of the above references.

Accordingly, the applicants respectfully request that this petition be granted, and that the present application receive expedited examination. Should any issues remain that might be subject to resolution through a telephonic interview, the Office is requested to telephone the undersigned.

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Respectfully submitted,

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